

We Claim:

1. In a network with a plurality of storage locations having attributes, said attributes
5 being characteristics of said storage locations, a method, comprising the steps of:
 providing a software facility interfaced with said network for identifying
 and allocating said storage locations to a storage owner based on the attributes of said
 storage locations;
 receiving with said software facility a network storage policy from an
10 authorized user, said authorized user having authority to control access to said storage
 locations on said network, said storage policy including attribute requirements for at
 least one of said storage locations; and
 programmatically applying said storage policy to storage decisions on
 said network using said software facility, said storage decisions determining where data
15 on said network is stored.
2. The method of claim 1 wherein said authorized user selects said storage location
attributes in said network policy from a list of storage location attributes.
- 20 3. The method of claim 1, comprising the further step of:
 configuring storage locations to provide specified attributes pursuant to
 said network storage policy.
4. In a network, said network interfaced with a host electronic device and including a
25 plurality of devices with storage locations located thereon, a method comprising the
steps of:
 providing a software facility interfaced with said network;
 using said software facility to identify by attribute available storage
locations on said plurality of devices; and
30 using said software facility to perform allocation of said available storage
locations based on said available storage location attributes, said allocation being the
association of a storage location with an owner, said owner having permission to write
data to said storage location and read data from said storage location.
- 35 5. The method of claim 4 wherein a storage location is allocated based on matching a
requested storage location attribute with the storage location attribute identified by said
software facility.

6. The method of claim 4 wherein a selected one of said storage locations is allocated based on matching a requested storage location attribute with an attribute of a storage location dynamically configured by said software facility.

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7. The method of claim 4, comprising the further step of:
placing an unallocated storage location into a pool of storage locations available to said software facility.

10 8. The method of claim 7 comprising the further step of:
placing a storage location into a pool of storage locations unavailable to said software facility.

15 9. The method of claim 7 comprising the further step of:
placing newly discovered unallocated storage locations into a pool of storage locations awaiting further action by said software facility, said storage locations not having been previously identified by said software facility.

20 10. The method of claim 4 wherein said software facility uses the Service Location Protocol (SLP) to identify available devices attached to said network.

25 11. The method of claim 4 wherein at least one of said plurality of devices interfaced with said network with storage locations thereon is a RAID (Redundant Array of Inexpensive/ Independent Disks) set.

12. The method of claim 4 wherein a storage location with a specified attribute is provided by dynamically configuring a storage location in response to a request from a user of said host electronic device interfaced with said network.

30 13. The method of claim 4, comprising the further steps of:
setting a network policy for data storage, said policy including storage location attributes requested by an authorized user, said authorized user having authority to make network storage decisions; and
configuring storage locations to provide specified attributes pursuant to
35 said network policy.

14. The method of claim 4 wherein said software facility is located on said host electronic device.

15. In a network with a plurality of storage locations having attributes, said attributes being characteristics of said storage locations, a medium holding computer-executable instructions for a method, comprising the steps of:

providing a software facility interfaced with said network for identifying and allocating said storage locations based on the attributes of said storage locations, said allocation being the association of a storage location with an owner, said owner having permission to write data to said storage location and read data from said storage location;

receiving with said software facility a network storage policy from an authorized user, said authorized user having authority to make storage decisions on said network, said storage policy including attribute requirements for storage locations; and

programmatically applying said storage policy to storage decisions on said network using said software facility, said storage decisions determining where data on said network is stored.

16. The method of claim 15 wherein said authorized user selects said storage location attributes in said network policy from a list of storage location attributes.

17. The method of claim 15, comprising the further step of:

automatically configuring storage locations to provide specified attributes pursuant to said network storage policy.

18. In a network, an apparatus comprising:

a processor;

a record of a plurality of unallocated storage locations interfaced with said network, said storage locations identified by attributes; and

a software facility for allocating said unallocated storage locations to devices and processes interfaced with said network based on said attributes.

19. In a network with a plurality of interfaced devices with storage locations located thereon, a method comprising the steps of:

providing a software facility interfaced with said network;

using said software facility to identify by attribute available storage locations on said plurality of interfaced devices;

configuring said available storage locations to provide storage locations with new attributes; and

5 using said software facility to perform allocation of said storage locations with new attributes, said allocation being the association of a storage location with an owner, said owner having permission to write data to said storage location and read data from said storage location.

10 20. The method of claim 19, comprising the further steps of:

receiving a network storage policy from an authorized user interfaced with said network; and

programmatically applying said network storage policy in the configuring and allocation of said storage locations.

15 21. The method of claim 20 wherein a storage location is allocated based on matching a storage location attribute requested by said network storage policy with the storage location attribute of a storage location identified by said software facility.

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